

ABSTRACT

An encryption device for a telephone having a handset and a base unit is disclosed. The device includes a handset interface, a first converter, an encryption processor, a second converter, and a host interface. The handset interface receives analog output signals from the handset. The first converter converts the analog output signals into digital output signals. The encryption processor includes a compressor, a key manager, an encryptor, and a modulator. The key manager generates key material for encrypting the digital output signals. The compressor compresses the digital output signals, the encryptor encrypts the digital output signals based on the key material, and the modulator modulates the encrypted digital output signals. The second converter converts the encrypted digital output signals into encrypted analog output signals. The host interface receives the encrypted analog output signals from the encryption processor, and forwards the encrypted analog output signals to the base unit.